

CLAIMS

1. An encapsulated probiotic in which one or more probiotic microorganisms are dispersed
 - 5 a) in an aqueous suspension of a protein and a carbohydrate
 - b) in an oil in water emulsion of a film forming protein and a carbohydrate and a fat, or
 - c) in an oil which is subsequently dispersed in a film forming protein and a carbohydrate
- 10 2. An encapsulated probiotic as claimed in claim 1 in which the carbohydrate contains a reducing sugar group.
- 15 3. An encapsulated probiotic microorganism as claimed in claim 1 or 2 in which one or more prebiotic materials are mixed with the probiotic microorganisms.
4. An encapsulated probiotic microorganism as claimed in claim 1 or 2 in which the carbohydrate in the film forming composition is a prebiotic carbohydrate.
- 20 5. An encapsulated probiotic microorganism as claimed in claim 1 in which the protein is casein or whey protein.
- 25 6. An encapsulated probiotic microorganism as claimed in claim 1 or 2 in which the carbohydrate is a resistant starch or a high amylose starch.
7. An encapsulated probiotic bacteria as claimed in claim 2 where the protein and carbohydrate is heat processed
- 30 8. An encapsulated probiotic bacteria as claimed in claim 2 where the protein and carbohydrate is heat processed in the presence of an oil or fat prior to addition of the probiotic bacteria.

9. A probiotic bacteria formulation in claim 3 where the starch is processed by heating and/or microfluidisation.
10. An encapsulated probiotic microorganism as claimed in claim 1 which is spray dried or freeze dried to form a powder.
11. An encapsulated probiotic microorganism as claimed in claim 1 in which the probiotic microorganism is selected from bifido bacteria, lactobacilli, saccharomyces, lactococci, streptococci and propionibacteria.
12. A probiotic powder consisting of a probiotic bacteria selected from bifido bacteria, lactobacilli, saccharomyces, lactococci, streptococci and propionibacteria encapsulated in a film forming mixture of casein or whey protein and an oligosaccharide.
13. A probiotic powder as claimed in claim 12 in which the film forming mixture has been heated to form Maillard reaction products between the oligosaccharide and the casein or whey protein.
20. 14. A probiotic powder as claimed in claim 12 in which the probiotic bacteria is a liquid probiotic concentrate
25. 15. A probiotic powder as claimed in claim 12 in which the probiotic bacteria is freeze dried.